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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,532	03/31/2004	Walter Fischer	75249-068	3471

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PATENT DEPARTMENT
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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,532

Applicant(s)

FISCHER ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 11, 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 12, 13, 15-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The election with traverse of Group II in the reply filed on May 15, 2006 is acknowledged. The traversal is on the ground that the simultaneous examination of the inventions does not impose an undue burden of examination. This is not found persuasive because the separate classifications of the inventions set forth on page 2 of the restriction and election of species requirement mailed April 21, 2006 confirms an undue search burden.

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims 1-9, 11, 21 and 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim.

2. The election of the species of diglycidyl ether of bisphenol A as epoxy resin (A) and the reactants dithioglycidyl ether of bisphenol A and diethylenetriamine for compound (B) conforming to formula Ia according to the description of the reactants provided on page 5, the last paragraph of the specification is acknowledged.

3. The subject matter of new claims 21-25 presented in the amendment filed May 15, 2006 is supported by pages 10-11 of the specification.

4. The word "And" in the last line of claim 10 should not be capitalized.

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5. The denotation wherein when X is $-\text{CHR}_4$, “ R_3 and R_4 together form an ethylene group” on page 1, the last line and page 2, line 2 of the specification as well as in independent claim 10, lines 10 and 12 is understood to indicate the radical “ $-\text{CH}-\text{CH}_2\text{CH}_2\text{CH}-$ forming a ring with the remainder of the moiety $-\text{C}(\text{SH})(\text{R}_1)-\text{CH}_2-$ ”.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 12, 13, 15-20 and 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 10, 12, 13, 15-20 and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. R_4 of $-\text{CHR}_4-$ in X of formulae (Ia) and (Ib) is solely denoted as forming an ethylene group with R_3 of the radical $-\text{CHR}_3-$. However, R_4 is undefined when R_3 is hydrogen since R_4 cannot form an ethylene group with R_3 when R_3 is hydrogen.

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Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. There is no antecedent basis in independent claim 10 for the amine equivalents of polyamine (C) since claim 10 does not require the presence of a polyamine (C) as denoted in claim 11.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 12, 13, 17-19 and 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron Patent No. 3,394,098 and Levine Patent No. 3,548,002.

8. Cameron (col. 6, Example VI) shows a mixture of the elected species of the diglycidyl ether of bisphenol A (Epoxy Resin A described in Example I in column 6, lines 7-8) and the reaction of excess ethylene diamine with propylene sulfide (Flexibiliser F set forth in column 5, lines 54-67) within the ambit of claimed compound (B) of formula (Ib) prepared by the reaction of a monoepisulfide with a polyamine according to page 6, the last paragraph to page 7, line 2 of the specification.

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9. Levine (col. 4, Example 8) shows a glycerol-modified diglycidyl ether of bisphenol A blended with the reaction product of excess ethylene diamine with propylene sulfide (Example 1, col. 2, lines 12-24) within the limits of claimed compound (B) of formula (Ib) for the same reasons espoused in the previous paragraph.

10. Although the structures of the reaction products of Cameron and Levine are not depicted, based on the equivalent reactants employed with an excess of the ethylene diamine would yield a structure within claimed formula (Ib).

11. None of the prior art recites claimed compound (B) of formula (Ia). More favorable consideration would be given to the limitation of X in formula (Ib) to exclude -CHR_4 and its formation of an ethylene group with R_3 .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers
Primary Examiner
Art Unit 1712